

**Chapter 121: EMISSION LIMITATIONS AND EMISSION TESTING OF RESOURCE RECOVERY FACILITIES**

**SUMMARY:** This regulation establishes stack emission limitations, operating practices, compliance and performance testing, and reporting and record keeping requirements for resource recovery facilities.

1. **Scope and Applicability.** This regulation shall be applicable in all ambient air quality control regions in the State of Maine and shall apply to all new, existing, and modified resource recovery facilities.
2. **Effective Date.** This regulation shall be effective immediately.
3. **Incorporation by Reference.** As indicated in this Chapter, portions of federal regulations codified at 40 CFR Part 60 Subparts A, B, Cb, Eb and BBBB as amended through July 1, 2006 have been incorporated by reference.

**(Note: This includes 40 CFR Part 60:**

**Subpart A** General Provisions;

**Subpart B** Adoption and Submittal of State Plans for Designated Facilities;

**Subpart Cb** Emission Guidelines and Compliance Times for Large Municipal Waste Combustors constructed on or before September 20, 1994;

**Subpart Eb** Standards of Performance for Large Municipal Waste Combustors for which construction commenced after September 20, 1994 or for which modification or reconstruction commenced after June 19, 1996;

**Subpart BBBB** Emission Guidelines and Compliance Times for Small Municipal Waste Combustion units constructed on or before August 30, 1999.)

**4. Definitions**

- A. **Class I Unit.** "Class I Units" means small municipal waste combustion units with aggregate plant combustion capacity greater than 250 tons per day of municipal solid waste.
- B. **Class II Unit.** "Class II Units" means small municipal waste combustion units with aggregate plant combustion capacity no more than 250 tons per day of municipal solid waste.
- C. **Commercial Operation.** "Commercial operation" means the time, not to exceed 180 days after initial startup, after which the emission unit achieves operation at the maximum production rate at which it will be operated.
- D. **Dioxin/furan.** "Dioxin/furan" means tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans, (PCDDs and PCDFs).
- E. **Large Municipal waste combustor unit.** "Large Municipal waste combustor unit" means a municipal waste combustor unit with a municipal waste combustor unit capacity for affected units that is greater than 250 tons per day of municipal solid waste.
- F. **Resource Recovery Facility.** "Resource recovery facility" means any building, structure, or installation where municipal wastes are incinerated to produce usable energy.
- G. The definitions contained in and referred to in 40 CFR Part 60 Subparts Cb, Eb and BBBB are hereby incorporated by reference.

**5. Large Municipal Waste Combustor Units Subject to 40 CFR Part 60 Subpart Cb.**

For all Large municipal waste combustor units for which construction is commenced on or before September 20, 1994 and for all designated units as set forth in 40 CFR Part 60 Subpart Cb the following shall apply:

**A. Emission Limiting Standards.** As set forth in 40 CFR Part 60 Subpart Cb, the emissions limits are hereby adopted and incorporated by reference except where the state may have established more stringent standards as specified in this subsection.

An owner or operator may request that compliance with the following applicable emission standards be determined using carbon dioxide measurements corrected to an equivalent of seven (7) percent oxygen, determined in accordance with 40 CFR Part 60 Subpart Eb.

- (1) **Particulate Matter.** The emission limit for particulate matter contained in the gases discharged to the atmosphere from a designated unit is 25 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
- (2) **Opacity.** The emission limit for opacity exhibited by the gases discharged to the atmosphere from a designated unit is 10 percent (6-minute average).
- (3) **Cadmium and Lead.** The emission limit for cadmium contained in the gases discharged to the atmosphere from a designated unit is 0.035 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. The emission limit for lead contained in the gases discharged to the atmosphere from a designated unit is 0.40 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
- (4) **Mercury.** The emission limit for mercury contained in the gases discharged to the atmosphere from a designated unit is 28 micrograms per dry standard cubic meter (ug/dscm), corrected to 7 percent oxygen or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen (dry basis), whichever is less stringent.
- (5) **Sulfur Dioxide.** The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere from a designated unit is 29 parts per million by volume or 20 percent of the potential sulfur dioxide emission concentration (80-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean.
- (6) **Hydrogen Chloride.** The emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from a designated unit is 29 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent.
- (7) **Dioxin/Furans.** The emission limits for dioxin/furans contained in the gases discharged to the atmosphere from a designated unit shall be the following:
  - (i) The emission limit for designated units that employ an electrostatic precipitator-based emission control system is 25 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

- (ii) The emission limit for designated units that do not employ an electrostatic precipitator-based emission control system is 25 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.
  - (8) **Nitrogen Oxides.** The emission limits for nitrogen oxides shall be the limits specified in Table 1 of 40 CFR Part 60 Subpart Cb. The averaging provisions specified in 40 CFR Part 60 Subpart Cb shall apply.
  - (9) **Carbon Monoxide.** The emission limits for carbon monoxide shall be the limits specified in Table 3 of 40 CFR Part 60 Subpart Cb.
  - (10) **Fugitive Ash Visible Emissions.** No owner or operator of a resource recovery facility shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points and buildings or enclosures of ash conveying systems and storage areas) in excess of 5 percent of the observation period (i.e., 9 minutes in any 3-hour period), as determined by EPA Reference Method 22 in 40 CFR 60, Appendix A. The provisions specified in this section do not apply during maintenance and repair of ash conveying systems.
- B. Operating Practices.** The operating practices applicable to each large municipal waste combustor unit shall be the operating practices specified in 40 CFR Part 60 Subpart Eb.
- C. Operator Training.** The operator training and certification requirements of 40 CFR Subpart Eb shall apply to all facilities with large municipal waste combustor units. Compliance with these requirements shall be conducted according to the schedule specified in 40 CFR Subpart Cb.
- D. Compliance and Performance Testing Requirements.** The compliance and performance testing requirements applicable to each large municipal waste combustor unit set forth in 40 CFR Subpart Eb except as provided for under 40 CFR Subpart B are hereby adopted and incorporated by reference.
- (1) When effluents from two or more affected units subject to the same standard are combined and exhausted through a common stack, the owner or operator may install a CEMS on each effluent or on the combined effluent. If the owner or operator elects to use one CEMS in a common stack, and the CEMS measures an exceedance of the emission standard, then the CEMS data shall represent an exceedance from each affected units, unless the owner or operator can demonstrate to the satisfaction of the Department that the excess emission did not occur from one of the affected units.
  - (2) When effluents from two or more affected units subject to the same standard are combined and exhausted through a common stack, the owner or operator may conduct performance testing on each effluent or on the combined effluent. If the owner or operator elects to conduct performance testing in a common stack, and the performance test measures an exceedance of the emission standard, then the performance test data shall represent an exceedance from each affected unit, unless the owner or operator can demonstrate to the satisfaction of the Department that the excess emission did not occur from one of the affected units.

- (a) For those affected units exhausting through a common stack and conducting a performance test for particulate matter, hydrogen chloride, lead, cadmium, mercury, and dioxins/furans, the following criteria shall be met in order to conduct performance testing in the common stack on the combined effluent: all affected units and emission controls shall be identical, units shall combust waste from the same waste stream, all affected units shall operate at the same unit load capacity during the performance test, and common stack testing shall be permitted only when the common stack test results measure below 50% of the emission limits in Section 5.A except for mercury. When conducting a performance test for mercury in the common stack, the stack test results when measured on a concentration basis (ug/dscm) shall not exceed the emission limit in Section 5.A. When subsequent unit testing [or alternate demonstration] for any pollutant demonstrates compliance with the emission limits in Section 5(A), the facility may resume performance testing in the common stack.
- (3) The alternative performance testing schedule for dioxins/furans specified in 40 CFR Part 60 Subpart Eb shall apply to large municipal waste combustor units where the performance tests for all affected units over a two-year period achieve a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter total mass, corrected to 7 percent oxygen.
- (4) Initial Performance Test. Except for facilities where a retrofit was not required, which have conducted performance testing in accordance with the performance test methods specified in 40 CFR Part 60 Subpart Eb, under similar operating conditions, within 12 months prior to the final compliance date; performance tests, as specified under 40 CFR Part 60 Subpart A, shall be completed no later than 180 days after the final compliance date for the affected facility.
- (5) In addition to the performance testing required in 40 CFR 60 Cb, large municipal waste combustor units shall conduct performance testing for the following metals:

Emissions testing for arsenic, nickel, chromium, and beryllium shall be conducted using EPA Method 29 (40 CFR, Part 60, Appendix A); or in any other manner as approved by the Commissioner. Testing shall be conducted according to a testing schedule as approved by the Commissioner. In no case shall the interval between testing exceed three years.

#### **E. Reporting, Record Keeping, and Compliance Schedules**

- (1) **Emissions Test Report Requirements.** The reporting and record keeping requirements applicable to each large municipal waste combustor unit subject to this Chapter, shall be the requirements as set forth in 40 CFR 60 Subpart A, except for the siting requirements under 40 CFR 60 Subpart Eb, and except for the following:
  - (a) All applicable reports required to be submitted under 40 CFR 60 Subpart Eb shall be submitted to the Department on a quarterly basis within (30) days of the last date of the reporting period.
  - (b) All performance test reports shall be submitted to the Department within sixty (60) days from the date of test completion, If despite best efforts, test results are not available within the (60) day period, the facility may request the Department's approval for an extended reporting deadline for such test results. Any such extension granted by the Department shall not exceed seventy-five (75) days from the date of test completion.

**(2) Schedule for Compliance**

All large municipal waste combustor units shall comply with the compliance schedule specified 40 CFR 60 Subpart Cb.

(a) Final compliance with the emission limitation requirements of Section 5(A) of this Chapter shall be achieved or ceasing of operation shall occur by May 10, 2008.

(b) The owners or operators of facilities for which 40 CFR Part 60 Subpart Cb applies, that cannot achieve compliance by that date, shall submit a closure agreement to the Department no later than May 6, 2008.

(3) Any municipal waste combustor plant which contains a large municipal waste combustor unit subject to Chapter 121 is subject to the licensing requirements of Chapter 140. Any municipal waste combustor plant subject to licensing solely because it is subject to Chapter 121, shall file an application for an operation license under the requirements of Chapter 140 as specified in Chapter 140, Appendix C.

6. **Large Municipal Waste Combustor Units Subject to 40 CFR Part 60 Subpart Eb.** For all resource recovery facilities defined as large municipal waste combustors for which construction is commenced after September 20, 1994, or for which modification or reconstruction is commenced after June 19, 1996, the following shall apply:

**A. Emission limitations** and other requirements as specified in 40 CFR Part 60 Subpart Eb; and for,

**Dioxin/Furans.** The emission limits for dioxin/furans contained in the gases discharged to the atmosphere from a designated unit shall be the following:

(i) The emission limit for designated units that employ an electrostatic precipitator-based emission control system is 25 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

(ii) The emission limit for designated units that do not employ an electrostatic precipitator-based emission control system is 25 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

(iii) For any unit constructed, reconstructed or modified after September 20, 1994, the emission limit shall be 13 nanograms per dry standards cubic meter (total mass), corrected to 7 percent oxygen.

**B. Performance Testing Requirements**

Testing during the first two (2) years, following 180 days after initial startup of facility operations, must be conducted at least once in every 6-month period, with a minimum of three months between performance tests.

(1) In addition to the performance testing required in 40 CFR 60 Subpart Eb, large municipal waste combustor units shall conduct performance testing for the following metals:

- (a) Emissions testing for arsenic, nickel, chromium, and beryllium shall be conducted using EPA Method 29 (40 CFR, Part 60, Appendix A); or in any other manner as approved by the Commissioner. Testing shall be conducted according to a testing schedule as approved by the Commissioner. In no case shall the interval between testing exceed three years.

**C. Reporting and Record Keeping Requirements**

All applicable reports required to be submitted under 40 CFR Part 60 Subpart Eb shall be submitted to the Department on a quarterly basis within (30) days of the last date of the reporting period.

- D. (1) All emission and performance test reports shall be submitted to the Department within sixty (60) days from the date of test completion. If despite best efforts, test results are not available within the sixty (60) day period, the facility may request the Department's approval for an extended reporting deadline for such test results. Any such extension granted by the Department shall not exceed (75) days from the date of test completion.

**7. Small Municipal Waste Combustor Class I or Class II Units.**

For all resource recovery facilities, either Class I or Class II units, , the following shall apply (except for periods of startup, shutdown and malfunction) per 40 CFR Part 60 Subpart BBBB:

- A. **Emission Limiting Standards.** An owner or operator may request that compliance with the following applicable emission standards be determined using carbon dioxide measurements corrected to an equivalent of seven (7) percent oxygen.

**(1) Particulate Matter**

- (a) For Class I units, emission limits for particulate matter are specified in Tables 2 and 3 of 40 CFR 60 Subpart BBBB.
- (b) For Class II units, the emission limit for particulate matter contained in the gases discharged to the atmosphere is 23 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. The averaging time is specified in Table 4 of 40 CFR 60 Subpart BBBB.

**(2) Opacity.**

The emission limit for opacity exhibited by the gases discharged to the atmosphere from a resource recovery unit is 10 percent (6- minute average).

**(3) Cadmium, Lead, Mercury, Nitrogen Oxides, and Dioxin/Furans.**

- (a.) For Class I units these emission limits are specified in Tables 2 and 3 of 40 CFR 60 Subpart BBBB.

For Class II units, the emission limits in the gases discharged to the atmosphere are as follows:

- i. Cadmium 30 micrograms per dry standard cubic meter (dscm);
- ii. Lead 660 micrograms per dry standard cubic meter;
- iii. Mercury 28 micrograms per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen (dry basis), whichever is less stringent;
- iv. Nitrogen Oxides 315-330 parts per million by volume.
- v. These emission limits are all corrected to 7 percent oxygen.

(b) **Dioxin/Furans.** The emission limits for dioxin/furans contained in the gases discharged to the atmosphere from a designated unit shall be the following:

(i) The emission limit for designated units that employ an electrostatic precipitator-based emission control system is 25 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

(ii) The emission limit for designated units that do not employ an electrostatic precipitator-based emission control system is 25 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

(4) **Sulfur Dioxide.**

The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere from a Class I or a Class II resource recovery facility is 30 parts per million by volume or 20 percent of the potential sulfur dioxide emission concentration (80-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean.

(5) **Hydrogen Chloride.**

The emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from a Class I or a Class II resource recovery facility is 25 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent.

(6) **Carbon Monoxide.**

The emission limitation for carbon monoxide, as measured at a location upstream of the control device, shall not exceed 100 parts per million (ppm) as an 8-hr running average corrected to 7 percent oxygen.

(7) **Fugitive Ash Visible emissions.**

No owner or operator of a resource recovery facility shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points and buildings or enclosures of ash conveying systems and storage areas) in excess of 5 percent of the observation period (i.e., 9 minutes in any 3-hour period), as determined by EPA Reference Method 22 in 40 CFR 60, Appendix A. The provisions specified in this section do not apply during maintenance and repair of ash conveying systems.

**B. Operating Practices**

The operating practices for Class I and Class II waste combustion units are specified in 40 CFR Part 60, Subpart BBBBB.

**C. Operator Training**

Operator training and certification requirements of 40 CFR Part 60, Subpart BBBBB shall apply to all facilities with Class I or Class II municipal waste combustor units.

**D. Compliance and Performance Testing.** The owner or operator of any applicable resource recovery facility shall prepare and submit to the Commissioner for approval, a plan for performing tests required under this regulation. Such plans shall include, but is not limited to,

sampling locations, test methods, sample analysis procedures, and quality assurance procedures. For any resource recovery facility which is issued an approved air emission license after the effective date of this regulation, the plan must be submitted ninety (90) days prior to the facility's start up.

- (1) **Emission Testing Schedule.** Testing required pursuant to this section shall be conducted in accordance with the following schedule:
  - (a) Testing during the first two (2) years of operation must be conducted at least once in every 6-month period, with a minimum of three months between performance tests. The two year test period shall begin upon the Department's determination that the facility has begun commercial operation. Selection of the testing schedule is subject to Commissioner approval.
  - (b) After the first two (2) years of operation, a test every twelve months is required, which shall be performed during the season designated by the Commissioner as reflective of worst performance after reviewing the first two years of data. Five (5) years from the date of commencement of commercial operation of the resource recovery facility the Commissioner shall determine, based on previous analyses, the frequency of further testing required pursuant to this subsection. In no case shall the interval between tests exceed three (3) years.
  - (c) Any alternative stack testing schedule must be submitted to the Department for preapproval and must meet the requirements of 40 CFR, Part 60 Subpart BBBB.
- (2) **Emission Testing.** The owner or operator of any applicable resource recovery facility shall conduct the following emission tests (All performance tests shall consist of three test runs):
  - (a) **Oxygen (or Carbon Dioxide).** Emissions testing for oxygen (or carbon dioxide) shall be conducted using EPA Method 3A or 3B (40 CFR, Part 60, Appendix A) or in any other manner as approved by the Commissioner.
  - (b) **Dioxin/ Furans.** Emissions testing for dioxin/ furans emissions shall be conducted using EPA Method 23 (40 CFR, Part 60, Appendix A) or in any other manner as approved by the Commissioner.
  - (c) **Hydrogen Chloride.** Emissions testing for hydrogen chloride shall be conducted using EPA Method 26 (40 CFR, Part 60, Appendix A) or in any other manner as approved by the Commissioner.
  - (d) **Particulate Matter.** Emissions testing for particulate matter shall be conducted using EPA Method 5 (40 CFR, Part 60, Appendix A) or in any other manner as approved by the Commissioner.
  - (e) **Metals.** Emissions testing for lead, cadmium, arsenic, nickel, mercury, beryllium, and chromium shall be conducted using EPA Method 29 (CFR 40, Part 60, Appendix A) or in any other manner as approved by the Commissioner.
- (3) **Continuous Emissions Monitoring.** Resource recovery facilities applicable to this section must install and operate instruments acceptable to the Commissioner for continuously



monitoring carbon monoxide (CO) emissions, sulfur dioxide emissions (SO<sub>2</sub>), and opacity. Continuous emissions monitoring instrumentation shall meet the requirements in 40 CFR, Part 60, Appendix B and F or as approved by the Commissioner.

**C. Reporting and Record Keeping**

- (1) When continuous emission monitoring (CEM) or continuous opacity monitoring (COM) indicates that the limits in Section 7(A) have been exceeded, the licensee shall document in writing the probable cause(s) for each exceeded emission limit and the corrective action taken after each exceeded emission limit in accordance with Chapter 117 Section 7. Continuous emissions monitoring data is to be retained by the owner or operator of the resource recovery facility for a minimum of six years.
- (2) All applicable reports shall be submitted to the Department on a quarterly basis within (30) days of the last date of the reporting period, in accordance with Chapter 117 Section 7.
- (3) All emission and performance test reports shall be submitted to the Department within sixty (60) days from the date of test completion. If despite best efforts, test results are not available within the sixty (60) day period, the facility may request the Department's approval for an extended reporting deadline for such test results. Any such extension granted by the Department shall not exceed (75) days from the date of test completion.
- (4) All records and reports required by 40 CFR 60 Subpart BBBB shall be submitted as specified by that subsection and by the facility's air emission license or upon request of the Department.

**8. General Requirements for Large and Small Resource Recovery Facilities.** The following section shall be applicable to all resource recovery facilities including large municipal waste combustor units:

**A.** The owner or operator of the resource recovery facility or his representative shall submit to the Department within 60 days of emission test completion the following information:

- (1) **Facility Operating Status.** A summary of facility process data shall be included in the resource recovery facility emission test report including:
  - (a) Load Level of waste expressed as
    - (i) the rate of steam production,
    - (ii) the percentage of the design capacity steam production,
  - (b) When requested by the Commissioner, comprehensive data reflecting and documenting the composition of the refuse (fuel);
  - (c) Temperature measured at the particulate matter control device inlet;
  - (d) Percent excess air;
  - (e) Air pollution control device parameters;
  - (f) If a soot blowing episode(s) was included in the sampling period, its duration; and
  - (g) Facility status prior to test, i.e. "cold" start or continuing operation.

- (2) Pollutant Emission Data. For each pollutant tested, the report shall include, in tabular form, the value(s) measured for each run as well as the mean of the three (or more) replicate tests.
- (3) Combustion Process Data. The report shall include, in tabular form, a summary of data relating to the overall combustion and air pollution control device(s) performance. This data shall include for each test run:
  - (a) stack temperature;
  - (b) stack gas % moisture;
  - (c) percent isokineticity;
  - (d) stack gas flow rate ( $\text{m}^3/\text{sec}$ ); and
  - (e) concentrations of combustion gases and acid gases.
- (4) License Conditions. The report should include a tabular summary of the emission limitations as required on the facility as air emission license conditions.

**B. Public and Local Participation.** A copy of emission test plans (protocols) and reports required to be submitted to the Commissioner under provisions of this regulation shall also be sent to the municipal officers, or their designees, of the municipality within which the facility is located or, in the case of a facility located within an unorganized territory or plantation, the county commissioners or their designees.

The municipal officers, or their designees, of the municipality within which the resource recovery facility is located, or in the case of a facility located within an unorganized territory or plantation the county commissioners, are to be paid by the applicant or permittee an amount not to exceed \$1000 per test, to independently review any test protocol, test results and standards and assumptions used during the test.

**C. Costs.** The entire costs of these tests shall be borne by the licensee, including costs incurred by the Department to perform test observations to insure the quality of the data collected. These costs shall be included in any license fee for new applications, and will be billed retroactively for existing licensed facilities.

AUTHORITY: 38 M.R.S.A., Section 585, 585-B & 590

EFFECTIVE DATE: March 21, 1989

EFFECTIVE DATE (ELECTRONIC CONVERSION): May 8, 1996

REPEALED AND REPLACED: April 7, 1998

NON-SUBSTANTIVE CORRECTIONS: June 18, 1998 - formatting only.

AMENDED: November 1, 2007

EFFECTIVE DATE: November 14, 2007

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### **BASIS STATEMENT**

This rule was established to protect public health by determining through scheduled stack tests the levels of dioxin and heavy metals from resource recovery facilities. In addition to the Basis Statement above, the Department has filed with the Secretary of State the response to representative comments received during the comment period.

### **BASIS STATEMENT FOR AMENDMENT: March 11, 1998**

This amendment replaces the previous Chapter 121. Section 129 of the Clean Air Act (CAA) of 1990 directs the Environmental Protection Agency (EPA) to develop emission guidelines to control air pollutant emissions from solid waste combustion, which includes Municipal Waste Combustor (MWC) units. Those guidelines set standards requiring reductions in emissions of toxic air pollutants.

Section 111(d) of the CAA establishes procedures for states that must submit State Plans for implementing the Emission Guidelines which are incorporated in Maine's 111(d) MWC State Plan for Large Facilities. The CAA requires states to adopt a Municipal Waste Combustor (MWC) 111(d)/129 plan for Large Facilities that incorporate the requirements established by the EPA. This is accomplished by setting performance standards, work practice standards or emission limitations based on controls and practices for each regulated industry.

The repeal and replacement of Chapter 121 incorporates those federal standards by reference as well as streamlines the old requirements from the state regulation adopted in 1989. In addition, because of the high level of public concern about mercury emissions in the environment and the associated public health risk, Chapter 121 creates a more stringent state standard for mercury.

*(APA Office Note: The paper filing of the April 7, 1998 Repeal/Replace includes as an Appendix A, a document entitled State of Maine, 111(D) Municipal Waste Combustor (MWC) State Plan for Large Facilities, prepared by the Maine Department of Environmental Protection, Licensing and Technical Services Division, dated March 11, 1998. It also includes copies of the CFR documents referenced in the rule chapter.)*

### **BASIS STATEMENT FOR AMENDMENT: November 1, 2007**

On May 10, 2006, the Environmental Protection Agency (EPA) amended the Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Large Municipal Waste Combustors. The Clean Air Act requires EPA to review these standards and guidelines every 5 years. EPA conducted the review in accordance with CAA section 129 and section 111 requirements, with standards revised as necessary. For existing Municipal Waste Combustors (MWC), EPA amended the standards to reflect the actual performance levels achieved by existing MWC. EPA lowered its emission limits for dioxin, cadmium, lead, mercury and particulate matter. The Maine DEP updated the emission standards listed in Chapter 121 to be at least as stringent as the standards in the amended EPA regulation. In addition, because of the high level of public concern about mercury and dioxin emissions in the environment and the

associated public health risk, Chapter 121 contains more stringent standards for mercury and dioxin.

The amendments to the federal MWC regulation require the state to revise and resubmit the State Plan for implementing the emission guidelines which are incorporated in Maine's 111(d) MWC State Plan for Large Facilities.

The revision to the state plan also included the addition of the New Source Performance Standards for New Small Municipal Waste Combustion Units and Emission Guidelines for Small Municipal Waste Combustion Units which EPA promulgated on December 6, 2000. The State of Maine implementation plan was revised to include performance standards and guidelines for both large and small Municipal Waste Combustors.

The small MWC section of Chapter 121 was reformatted to be consistent with the format used for the large MWC section of Chapter 121. It includes more stringent emission standards for small MWC units. These more stringent standards reflect the license limitations already being achieved by the state's only small MWC.